

PD01-0533-02



PD01-0533-01

# **TMI Remote Assay System**

## **Problem**

The INEEL's Three Mile Island (TMI) spent fuel transfer project needed to characterize spent nuclear fuel debris to determine its fissile material content.

# Baseline Technology

Physical sampling and destructive analysis to determine fissile material content.

### Innovative Technology

The TMI Remote Assay System uses a gamma-ray spectrometer to non-destructively determine fissile material content.

#### **Comparison**

This system avoids sample collection and shipment of samples off-site for destructive analysis.

#### **Benefits**

This system enabled the project to reduce worker exposure by not collecting and preparing physical samples for analysis, and by accelerating spent fuel transfers.

SPENT NUCLEAR FUEL PROGRAM

